

OHIO AGRICULTURAL EXPERIMENT STATION
Northwestern Substation -- Hoytsville, Ohio

Department of Horticulture Mimeograph Series No. 262
December 29, 1961

SWEET CORN VARIETY TRIALS - 1961
Hoytsville, Ohio

Walter N. Brown*

Cataloged
MAR 30 1962
LIBRARY

The 1961 sweet corn evaluation trials at Hoytsville consisted of 56 varieties planted on May 31, 1961. Each of the varieties were planted in single row plots replicated four times. Each plot contained twenty-one hills spaced 18 inches in the row with 36 inches between rows. Four kernels per hill were planted by hand jabber. Later at the three-leaf stage stand counts were made to determine germination and then seedlings were thinned to two plants per hill permitting a maximum stand of 19,360 plants per acre. Fertilizer at the rate of 750 lbs/A of 5-10-10 was drilled and disced in prior to planting, after plowing down approximately 12-15 tons of manure with a 2-year alfalfa sod. One side dressing of 100#/A of ammonium nitrate was applied with cultivator attachment on June 28. Plants were not sprayed for control of flea beetle, corn borer or corn ear worm. First harvest was made on August 15 and the last on September 8.

For the yield records only marketable size ears were included, however, some ears damaged by ear worm were included since it was assumed that insects could have been controlled by the use of suitable pesticide treatments.

The symbols and rating system used are as follows:

Average Depth of Kernel: Average length of 3 kernels from center section of 3 ears selected at random from each plot

Color of Kernels: LY - light yellow; MY - Medium yellow; Dy - Dark yellow; B - Bright; I - intermediate; D - Dull.

Ease of Snapping: 1 very difficult to 5 easily snapped.

Shanks: 1 - long, over 6" to 5-short 1" or less.

Flag Number: 1 - none to 5 over eight.

Flag Length: 1-less than 2 inches to 5 - over eight inches.

Tip Cover: 1-exposed to 5-long, extending 3" or more.

Silk Color: 1 - dark brown to 5- clear or white.

Husk Color: 1 - light green and dull to 5 - dark glossy green.

Husk Tightness: 1 - loose to 5-tight.

General Univormity: 1 - poor to 5-excellent.

Sources of Seed

<u>Code</u>	<u>Source</u>
A ₂	Asgrow Seed Co. Inc., 272 George St., New Haven 2, Conn.
B ₁	W. Atlee Burpee & Co., Huntington Park Ave. @ 18th St., Phila. 32, Pa.
F ₁	Ferry-Morse Seed Co., P.C. Box 254, Racine, Wisc.
H ₁	Joseph Harris & Co., Inc., Moreton Farms, Rochester 11, N.Y.
H ₂	Holmes Seed Co., 1017 9th St. S.W., Canton 11, Ohio
L ₂	Letherman Seed Co., 501 McKinley Ave. N.W. Canton 2, Ohio
R ₁	Rosbon Quality Seeds, Inc., Hall, N.Y.
R ₂	Rogers Brothers Seed Co., P.O. Box 2188, Idaho Falls, Idaho
S ₄	Seed Research Specialists, Inc. PO Box 3091, Modesto, Calif.

GENERAL COMMENTS

The weather during the early growing season was cold and wet resulting in uneven germination and emergence. This uneven plant development persisted throughout the season and caused variable maturity within a variety plot at harvest. Yields were generally lower than normal with both ear size and number being reduced. Mean temperature and rainfall recorded at the Northwestern Substation, Hoytsville, were as follows:

	Mean Temp.	Rainfall
June	66.2	4.02
July	72.2	5.65
Aug.	71.5	1.92
Sept.	69.4	4.20

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VC-61

TABLE 1. NORTHWESTERN SUBSTATION
SWEET CORN VARIETY TRIALS - HOYTVILLE, OHIO

Row No.	VARIETY AND LOT NUMBER		Source	Days to first harvest	Marketable Yield/Acre		Average weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percentage of Ears Having Given Number of Rows of Kernels								Average Depth of Kernel	Color Kernel	Ear Smut	Ear Worm	Ease of Snapping(1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color (1-5)	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity(1-5)
					Dozens of Ears	Weight (Tons)				8	10	12	14	16	18	20	22													
					Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	mm		%	%										
1	North Star	1900T	H ₁	76	829	3.0	.61	7.3	1.8	3	3	80	11	-	3	-	-	8.0	DYI	8.3	0.9	5	4	3	4	3	4	3	4	
2	Gold Crest	15506	L ₂	76	960	2.9	.50	7.1	1.6	4	15	75	6	-	-	-	-	7.5	MYI	8.0	0.8	3	4	3	3	3	4	4	3	3
3	Seneca Sunbeam	1010LF	R ₁	76	791	3.0	.63	6.5	1.5	-	3	47	40	10	-	-	-	7.7	LYI	4.9	0.9	3	3	3	3	3	4	4	3	3
47	Earliking	1907T	H ₁	76	707	2.6	.60	6.6	1.7	-	-	50	40	10	-	-	-	8.4	MYI	12.0	2.2	3	4	3	3	4	4	3	4	3
4	Golden Beauty	1887T	H ₂	78	822	2.8	.58	7.2	1.7	3	6	56	27	5	3	-	-	8.3	MYI	15.9	2.8	4	4	3	3	3	3	4	4	4
5	Morning Sun	--	H ₂	78	991	3.9	.66	7.5	1.6	1	3	28	8	45	15	-	-	8.0	MYI	3.1	0.8	3	4	4	4	3	2	4	3	3
6	Carmelcross	1885T	H ₁	80	907	3.8	.71	8.3	1.6	-	-	60	35	5	-	-	-	7.5	LYI	1.7	1.7	4	3	3	4	4	4	3	4	4
8	Asgrow Golden 22	1-106	L ₂	80	803	3.6	.71	7.8	1.5	-	-	44	25	30	1	-	-	7.8	MYB	0	1.8	3	3	3	3	3	4	4	4	4
7	Northernbelle	1899LF	H ₁	82	1068	4.5	.70	7.7	1.5	-	-	8	51	36	5	-	-	7.8	DYI	0	0	3	4	3	3	3	3	4	4	4
9	Honey Gold	-	H ₂	82	1037	3.6	.59	7.6	1.5	-	-	54	41	5	-	-	-	7.9	MYI	0	0.7	3	4	3	3	3	3	4	3	4
10	Sugar King	1-13506	L ₂	82	1099	4.2	.64	7.9	1.5	-	-	-	14	53	31	2	-	7.7	LYB	0	0	3	4	4	3	3	2	4	3	4
11	F-M Cross	1891LT	H ₁	82	976	4.3	.73	8.0	1.6	-	-	-	10	39	45	6	-	8.0	MYI	0	0	5	4	4	4	4	3	4	4	4
LSD @ 5% Level						242	1.1																							

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TABLE 1. (Cont'd) NORTHWESTERN SUBSTATION SWEET CORN VARIETY TRIALS - Hoytville, Ohio

Row No.	VARIETY AND LOT NUMBER		Source	Days to First Harvest	Marketable Yield/Acre		Average Weight of Ears Unhusked	Average Length of Ears Husked	Average Diameter of Ears Husked	Percentage of Ears Having Given Number of Rows of Kernels								Average Depth of Kernel	Color Kernel	Ear Smut	Ear Worm	Ease of Snapping (1-5)	Shanks (1-5)	Flag Number (1-5)	Flag Length (1-5)	Tip Cover (1-5)	Silk Color (1-5)	Husk Color (1-5)	Husk Tightness (1-5)	General Uniformity (1-5)
					Dozens of Ears	Weight (Tons)				8	10	12	14	16	18	20	22													
36	Golden Security	1-195			Doz.	Tons	Lbs.	In.	In.	%	%	%	%	%	%	%	mm.		%	%										
36	Golden /Security	1-195	L ₂	91	1298	6.0	.77	7.8	1.7	-	-	-	17	55	25	3	-	8.0	MYD	0	0.6	3	2	4	4	4	3	4	3	4
41	Iobelle (Fla. 104)	9001	A ₂	91	1206	5.7	.79	7.9	1.9	-	-	7	18	38	25	12	-	10.0	MYB	0	0	4	3	4	5	4	5	5	4	5
22	Surecross	5145	B ₁	92	791	4.3	.90	8.5	1.8	-	-	30	44	26	-	-	-	10.3	DYI	8.8	3.9	3	3	4	5	3	5	3	3	4
56	XP 215	63532	A ₂	92	876	4.0	.76	8.0	1.8	-	-	5	12	55	5	20	3	8.5	MYB	0.9	0.9	4	3	3	4	3	4	3	3	4
38	Golden Sensation	3357901	S ₄	94	1045	4.6	.73	8.4	1.7	-	-	10	30	40	20	-	-	9.2	MYB	0	0.8	3	2	2	3	4	4	2	3	4
39	Golden Sensation WP	20569	S ₄	94	1053	6.1	.95	9.3	1.9	-	-	-	25	40	30	12	-	9.0	MYB	0.7	0.7	3	4	3	2	3	4	1	4	4
40	Merit (XP 1060)	63526	A ₂	94	1045	4.9	.78	8.2	1.7	-	-	-	-	25	55	5	15	8.5	MYB	0	0	4	4	2	3	2	4	1	2	5
42	Deep Gold	1-106	L ₂	94	868	4.2	.81	7.9	1.9	-	-	-	-	25	45	25	5	9.0	MYB	0.9	4	4	4	2	2	3	5	2	3	3
43	XP 2055	63043	A ₂	94	799	4.2	.87	7.8	2.1	-	-	-	-	13	42	35	10	11.8	DYB	0	0	3	4	3	2	3	5	4	3	3
52	XP 247	63529	A ₂	94	1191	6.2	.87	8.1	2.0	-	-	-	1	24	50	25	-	11.0	MYB	0	0	2	4	3	3	3	4	3	3	4
44	Victory Golden	1-106	L ₂	96	1137	5.7	.83	8.0	1.9	-	-	2	15	60	20	3	-	9.3	MYB	1.4	0.7	2	4	4	3	3	5	3	3	3
50	XP 249	63531	A ₂	96	1037	5.3	.85	7.3	2.1	-	-	-	-	-	1	14	85	12.0	MYB	2.2	0	3	3	3	4	3	5	3	3	3
	LSD @ 5% Level				2421.1																									

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